

REMARKS

The application has been reviewed in light of the Office Action dated January 6, 2004. Claims 1-15 are pending, with claims 1-7 and 12-15 having been withdrawn by the Patent Office from examination. Accordingly, claims 8-11 are currently under examination, with claim 8 being the sole claim under examination in independent form. By this Amendment, Applicants have amended claim 8 to clarify the claimed invention.

The Office Action states that examination of the application will be restricted by the Patent Office under 35 U.S.C. §121 to one of the following allegedly distinct species:

- Group I. Claims 1-7, drawn to a method, classified in class 427, subclass 434;
- Group II. Claims 8-11, drawn to an apparatus, classified in class 118, subclass 64;
- Group III. Claims 12 and 13, drawn to a photoconductive element, classified in class 430, subclass 56;
- Group IV. Claims 14, drawn to an image forming method, classified in class 430, subclass 133; and
- Group V. Claims 15, drawn to an image forming apparatus, classified in class 399, subclass 159.

Applicants hereby confirms election, with traverse, to prosecute the invention of Group II, claims 8-11.

Applicants, however, respectfully request reconsideration of the restriction requirement. Under 35 U.S.C. §121, restriction may be required if two or more independent and distinct inventions are claimed in one application. Under M.P.E.P. §803, the application must be examined on the merits, even though it includes claims to distinct

inventions, if the search and examination of an application can be made without serious burden.

The inventions of Groups I-V are not independent. Under MPEP §802.01, "independent" means there is no disclosed relationship between the subjects disclosed. As acknowledged in the Office Action, Groups I and IV and Groups II and V are related as process and apparatus for practice of the process, and Groups I and III are related as process of making and product made. Therefore, Applicants respectfully submit that the Groups are not independent and restriction is improper.

In addition, Applicants submit that it would not be a serious burden if restriction is not require, because a search for prior art for one Group will likely turn up relevant references for one or more other Groups. Therefore, Applicants submit that search and examination of the Groups together would not be a serious burden.

Accordingly, in view of the preceding remarks, Applicants respectfully request that the restriction requirement be withdrawn.

Claims 8-11 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Japanese Patent Application Publication No. 5-241355 (Hiroshi) in view of Japan Patent Application Publication No. 63-7873 (Masayuki) and U.S. Patent No. 6,010,572 to Furusawa et al.

Applicants have carefully considered the Examiner's comments and the cited art, and respectfully submit that independent claim 8 is patentable over the cited art, for at least the following reasons.

This application relates to tools (in the form of methods and apparatuses) for coating cylindrical photoconductive elements.

Conventionally a coating liquid which contains a quick-drying solvent is typically used. During the short interval of time between lifting of the conductive base away from the bath and drying, the base

is subjected to a light stream of air flowing therearound and to the vapor of the solvent produced from the photoconductive layer. In addition, when a plurality of conductive bases are positioned in a limited space, each base is affected even by the flow of vapor of the solvent from adjacent bases. Under these conditions, conventionally coating tools produce a photoconductive layer or film which has irregular thickness.

Applicants devised coating tools for effectively coating a plurality of cylindrical photoconductive elements in a limited space and in a uniform manner.

For example, independent claim 8 is directed to a coating apparatus which comprises a supporting device and a bath. The supporting device comprises a holder support movable in an up-and-down direction, a plurality of holder members affixed to the holder support for supporting a plurality of cylindrical bodies, and a flexible hood. The bath is positioned below the supporting device and stores the coating liquid. The flexible hood folds or contracts at a top of the bath, rises together with the plurality of cylindrical bodies when the plurality of cylindrical bodies are lifted out of the bath at a constant speed or a varying speed, and has a bottom positioned at a level coincident with or below a level of bottoms of the plurality of cylindrical bodies when the flexible hood is brought to a stop after a lift. The bath comprises a plurality of chambers each being positioned beneath one of the plurality of cylindrical bodies and each storing the coating liquid.

The flexible hood is affixed to the holder support in such a manner as to surround the plurality of cylindrical bodies. Each of the cylindrical bodies is positioned in a space that is closed at an upper

portion. Thus, the hood and closed upper portion isolates the cylindrical bodies from a stream of air when the cylindrical bodies are lifted and drying, and during drying the vapor of the solvent has uniform density around the individual cylindrical body and can flow down due to its own weight, thereby producing a uniform film on the cylindrical body.

Hiroshi, as understood by Applicants, is directed to a mechanism for avoiding overflowing and obviating nonuniformity and streaking in a process for coating an electrophotographic sensitive body. The mechanism allows a coating tank to be tilted to discharge a coating solution.

As acknowledged in the Office Action, Hiroshi does not disclose or suggest several elements of the claimed invention, including any type of a hood which encloses a plurality of cylindrical bodies. In addition, Applicants do not find a teaching or suggestion in Hiroshi that each of the cylindrical bodies is positioned in a space that is closed at an upper portion.

Masayuki, as understood by Applicants, is directed to an extensible hood for a substrate to which immersion coating is to be applied.

However, as acknowledged in the Office Action, the coating apparatus of Masayuki does not provide for coating immersion to be applied to a plurality of cylindrical bodies. Thus, for example, Masayuki does not provide (a) a supporting device for supporting a plurality of cylindrical bodies or (b) a hood which is affixed to the holder support and surrounds the plurality of cylindrical bodies.

Furusawa, as understood by Applicants, is directed to a dip coating apparatus. The apparatus includes a cover disposed above a

coating solution tank and a solution receptacle. The cover has opening portions through which cylindrical members can pass.

However, Applicants do not find a teaching or suggestion in Furusawa that the flexible hood is affixed to the holder support in such a manner as to surround the plurality of cylindrical bodies, and each of the cylindrical bodies is positioned in a space that is closed at an upper portion.

Applicants simply do not find disclosure or suggestion by the cited art of a coating apparatus which comprises a supporting device and a bath, wherein (a) the supporting device comprises a holder support, movable in an up-and-down direction, a plurality of holder members affixed to the holder support for supporting a plurality of cylindrical bodies, and a flexible hood, (b) the flexible hood folds or contracts at a top of the bath, rises together with the plurality of cylindrical bodies when the plurality of cylindrical bodies are lifted out of the bath, and is affixed to the holder support in such a manner as to surround the plurality of cylindrical bodies, and (c) each of the cylindrical bodies is positioned in a space that is closed at an upper portion, as provided by independent claim 8 as amended.

Since the cited art does not disclose or suggest each and every feature of the claimed invention, the cited art does not render the claimed invention unpatentable.

Accordingly, for at least the above-stated reasons, Applicants respectfully submit that independent claim 8, and the claims depending therefrom, are patentable over the cited references.

If a petition for an additional extension of time is required to make this response timely, this paper should be considered to be such a petition, and the Commissioner is authorized to charge the requisite

fees to our Deposit Account No. 03-3125.

The Office is hereby authorized to charge any additional fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Allowance of this application is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul Teng", is written over a horizontal line.

Paul Teng, Reg. No. 40,837  
Attorney for Applicants  
Cooper & Dunham LLP  
Tel.: (212) 278-0400